

CLAIMS

1. A process for producing at least one electrical
5 contacting pad (1) on a receiving zone (2) of an electronic component, or for regenerating a plurality of electrical contacting pads (1) produced on receiving zones (2) of an electronic component (3), in which:

- 10 - a liquid alloy or metal (4) is injected into at least one channel (5) comprising two portions, a feed portion (5A) and a molding portion (5B) which are separated by a narrowing (5C), said channel (5) being positioned in such a way that the molding portion (5B) opens on the receiving
15 zone (2),
- the molding portion (5B) is separated from the receiving zone (2) before complete solidification of the metal or alloy (4), while the feed (5A) and molding (5B) portions remain joined,
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which process is characterized in that the feed portion (5A) is part of a first part forming a die (6), and the molding portion (5B) is part of a separate second part forming a mold (7), said die and mold being juxtaposed
25 to form the channel (5).

2. The process as claimed in claim 1, characterized in that the liquid alloy or metal (4) is moved in the opposite direction to that of injection through the feed portion (5A), before the molding portion (5B) is separated from the receiving zone (2).

3. The process as claimed in claim 2, characterized in that the alloy (4) is moved by suction.

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4. The process as claimed in claim 3, characterized in that the suction is created by the movement in the opposite direction (R) to that of injection (I) of a

poppet valve-type close-off element (9) situated upstream of the channel (5) when considered in the direction of injection (I), towards a position in which said close-off element (9) stops the supply of liquid alloy or metal (4) to the channel (5).

5. The process as claimed in one of claims 1 to 4, characterized in that the separation of the molding portion (5B) from the receiving zone (2) takes place in
10 a blanket of inert or reducing gas (G).

6. The process as claimed in claim 5, characterized in that the gas (G) comprises nitrogen.

15 7. The process as claimed in claim 6, characterized in that the gas (G) comprises a component containing a carboxyl group.

20 8. The process as claimed in claim 7, characterized in that the carboxyl group-containing component is formic acid.

9. A device for producing at least one electrical contacting pad (1) on a receiving zone (2) of an electronic component (3), or for regenerating a plurality of electrical contacting pads (1) produced on receiving zones (2) on an electronic component (3), said device comprising a channel (5) for conveying liquid alloy or metal (4), said channel (5) itself comprising two portions, a feed portion (5A) which is part of a first part forming a die (6), and a molding portion (5B) which is part of a second part forming a mold (7), said feed (5A) and molding (5B) portions being separated by a narrowing (5C), which device is
30 characterized in that it comprises a means (10) for fixing the die (6) relative to the mold (7), allowing
35 said die (6) and mold (7) to be juxtaposed in a fixed manner to form the channel (5).

10. The device as claimed in claim 9, characterized in that the die (6) includes a plate comprising at least one porous region that forms the feed portion (5A).

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11. The device as claimed in claim 9 or 10, characterized in that it comprises upstream of the die (6) when considered in the direction of flow of the liquid alloy or metal (I), a reservoir (11) designed to 10 contain the liquid alloy or metal (4), said reservoir (11) having a lower opening (11A) feeding into a sump (12) which communicates with said die (6), the movement of the liquid alloy or metal (4) through the lower opening being controlled by a poppet valve-type moving 15 close-off element (9) able to move parallel to the direction of flow of the liquid alloy or metal, between an upper position in which it closes the lower opening (11A), and at least one intermediate position in which it allows the liquid alloy or metal (4) to flow through 20 to the sump (12) and then on to the die (6).

12. The device as claimed in claim 9 or 10, characterized in that it comprises a means for dispensing a gas (G) around the molding portion.

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13. The device as claimed in claim 12, characterized in that the gas (G) is inert or reducing and comprises a component containing a carboxyl group.

30 14. The device as claimed in claim 13, characterized in that the carboxyl group-containing component is formic acid.

35 15. The device as claimed in claim 13 or 14, characterized in that the gas (G) includes nitrogen.

16. The device as claimed in one of claims 13-15, characterized in that the gas (G) dispensing means

comprises a diffusion means and, situated upstream of said diffusion means, a production means, said diffusion means allowing the carboxyl group-containing component to be imbibed by a primary inert or reducing
5 gas.

17. The device as claimed in one of claims 9-16, characterized in that the channel (5) is designed to be positioned above the receiving zone (2).